

# Serialising Drugs to Combat Fraud

As drugs become more readily available through ease of access to online markets, new programmes have begun to emerge such as the European serialisation initiative

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The worldwide pharmaceutical market is huge, estimated at over \$1 trillion in 2016 (1). A growing portion of this is over-the-counter (OTC) medicines, which are projected to be worth \$178 billion in 2024, driven by governments encouraging our ageing populations to check with their pharmacist before going to A&E to reduce the non-urgent load on hospitals (2).

An increasing number of patients are purchasing these OTC products online. Euromonitor estimates that despite only being 2% of sales in 2017, the speed at which this has grown in recent years has focused pharma companies' attention, especially after Amazon quietly launched a line of OTC products in 2018 (3-4).

Unfortunately, buying pharmaceutical products online is fraught with issues; for example, it is estimated that a significant proportion of Viagra bought online is fake, and the side effects of counterfeit drugs can be fatal (5-6). Recently, the UK authorities seized a large amount of Diazepam, modafinil, and dermal fillers (7). The effect of poor dermal products can be life changing (8).

The issue of pharmaceutical fraud has been recognised by many countries, which has led to initiatives such as the European initiative to serialise all drugs (9). This, of course, is a great proposal, but there are increasing concerns that small- and medium-sized manufacturers are not ready for the new regulations (10). Prescription medicines are not immune to counterfeits either. The Wall Street Journal recently reported the awful story of a young man who died after taking a sleeping pill given by a friend (11).

The challenge is that packaging lines are very traditional, based on high-volume production because margins are slim. These mass production lines of boxes and labels are not, by nature of the equipment, set up to meet individual serialisation package requirements, and the investment in new digital printing lines that are capable of 'per unit' identification is often out of scope for many converters.

Additional features and serialisation requirements need to be combined. Making pharma and related packaging 'smart' offers benefits to converters, brands, prescribers, and the consumer.

Near field communication (NFC) integrated circuits (ICs) are unique by design. Each IC has its own exclusive ID, enabling the supplier, channel, and end user to track and be confident of the product's provenance. NFC ICs mean that we (the consumers) could use our smartphones to tap on a pharmaceutical product and immediately read its ID.

In addition to meeting regulatory requirements, the integrated NFC IC could allow us to access unlimited information about the product without the need for a magnifying glass. Not only could we see incredibly detailed data in our own language, but also links to advice via online chat, professional forums, and special interest groups.

A multitude of benefits for the brand owner can also be identified. Instead of relying on intermediaries for information about their consumers, they can establish a direct relationship. There is no need to pay for leads or struggle through the new EU GDPR rules; when a consumer taps on the product, they opt-in to a relationship. As the online pharma market grows, this is increasingly significant. Once a connection has been established

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with a consumer, the brand can offer incentives to re-order directly and promote complementary products. With the younger generation wanting companies to be more ethical and offer more sustainable products, direct contact is the ideal way to establish a brand's credentials (12).

With an estimated 3.5 billion consumers projected to have NFC readers in their hands in 2019, combined with an ever-growing familiarity with tapping our smartphones to pay or engage, this is surely the right time to use this technology to increase our confidence in pharmaceutical and related products.

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## About the author



Gillian Ewers is an experienced marketing professional with a track record of launching new products to market in high-tech businesses. She brings a wealth of knowledge of delivering strategic roadmaps, marketing materials, and product lifecycle management across multiple sectors,

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